

<p style="text-align: center;">Course Syllabus, Fall 2019 Psychology 302: Tuesday and Thursday 4:00 to 5:20 250 Clinical Services Building</p>

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Office Hours: Wednesday 3 - 4 and by appointment

Lab GTFs:
Office:
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Office Hours:

Course Description: Statistics are central to research in many sciences, including psychology. Statistical analyses help to answer the empirical questions that researchers have, allowing them to evaluate data for patterns and to make conclusions. Statistics are central to everyday life as well. We use them to predict the weather, determine the price of insurance, see trends in voting, predict disease trends, make money on the stock market; the examples go on and on. Understanding the concepts behind statistics will help you to see the world more rationally and perhaps make better decisions.

Course Objectives: The goals of this course are to help you:

- Improve your ability to identify patterns in data and relate these patterns to substantive issues.
- Select and perform the correct statistical analysis procedures, either by hand (for basic statistics) or using a computer software program.
- Explain statistical analyses and concepts in writing.
- Understand the statistical analyses of others as presented in journals or reports.

This class is much more than a math class. While math is involved, the majority of it is fairly simple. The theoretical concepts of this class are much more important, and often more difficult. If you are mathphobic do not fear, once you get the concepts the mathematical will be straightforward.

Course Design: You will be best served by being active learners (always work along with the exercises). You are encouraged to work collaboratively on all assignments (other than exams). The instructor and TAs are valuable resources you should take advantage of (ask questions in class, labs, and during office hours).

Book & Calculator: The required text is Navarro and Foxcroft, *Learning Statistics with Jamovi* and is available online for free at: <https://www.learnstatswithjamovi.com/>. Assigned readings should be read **before** class. You will also need an iClikr and a hand-held **calculator** that can do single variable statistics. No need for graphing calculators. **Bring iClicker, calculator & text to class.**

Course Requirements: Your grade for this class will be based on 4 things:

1. **Exams:** There will be a two midterm exams and a final exam. The exams will include questions taken from the text, lab, and lecture. As the nature of statistics is cumulative, the exams will be as well.

However, there will be a focus on the most recently learned material. There will be some calculation required so you will be permitted to use a calculator (electronic devices other than a simple calculator will not be an acceptable replacement). Another important aspect of the exams will be to select the test that is most appropriate based on the research question and structure of the data. As the focus of this class is on conceptual understanding rather than memorization you will be provided with a sheet with all of the formulas required to complete the exam.

Makeup Exams: It is important to be prepared and present for all scheduled exams. However, I recognize that there are some situations in which you simply cannot make it to an exam. In the case of a serious illness, emergency, religious observance, or university sponsored event, make up exams will be allowed. If you have a scheduled university sponsored event or religious observance, you must let me know well in advance of the listed exam date (at least 1 week) and we will arrange for you to take an exam before you leave. If you have a serious illness or an emergency, you must let me know prior to the exam (before 9:00am) and we will make arrangements for a make-up. Documentation that verifies the event (e.g., a note from a physician) will be required upon request. If you have questions about what type of documentation is required for a specific situation, contact me.

2. **Quiz Homework:** You will have weekly online quizzes throughout the term. These are due by Sunday at 11:45 each week and become unavailable when due, so **cannot be turned in late**. You can take each Quiz up to two times and you will be awarded the average of the two scores.

3. **Jamovi Homework:** We will use Jamovi to complete data analysis assignments and should be completed as a Word document (.doc). Make sure to include any relevant Jamovi output in your file. To turn it in, go to the course Canvas page, 'Assignments.' This will lead to a page where you can upload your document. These are due by Sunday at 11:45 each week with a 10% reduction in points available for every day late up to 4 days.

4. **Attendance:** Participation points are gained from in-class exercises through your **iClickers**. Credit is not based on whether you got the right answer, but only on whether you tried. There is strong correlation between class attendance and final grade. Missing class may leave you confused, and missing lab will make it VERY difficult to complete the homework correctly. Do not expect the instructors to repeat material they already presented in class or lab; office hours are best used for review and discussion of material after doing the reading and attending lecture, and for help with homework. Slides from lecture will be posted on Canvas, but you may want to arrange to share notes with a classmate since much of the material will be presented on the whiteboard and may not be found on the slides.

Grading: Your final grade in the course is based on your total points accumulated on the three tests, your homework, and attendance, as described above. To summarize:

Midterm Exams (10% each)	= 20%
Final Exam	= 20%
Quiz Homework	= 25%
Jamovi Homework	= 25%
<u>Attendance/In-class Activities</u>	<u>= 10%</u>

The following grid provides the letter grade associated with each percent.

A	93-100%	B	83-86.9%	C	73-76.9%	D	63-66.9%
A-	90-92.9%	B-	80-82.9%	C-	70-72.9%	D-	60-62.9%
B+	87-89.9%	C+	77-79.9%	D+	67-69.9%	F	59.9% or below

Policies

Special Accommodations

The UO works to create inclusive learning environments. If there are aspects of the instruction or design of this course that result in disability-related barriers to your participation, please notify me as soon as possible. If you have a documented disability, please request that a counselor at the Accessible Education Center (uoaec@uoregon.edu, tel. 541-346-1155) send a letter verifying the type of accommodation that is appropriate. For a list of resources provided by the Accessible Education Center, please see <http://aec.uoregon.edu>.

Cheating/plagiarism: Any form of academic dishonesty, including cheating on exams, copying answers off of other students during exams, having other students help you falsify your attendance, and plagiarizing of any kind will absolutely not be tolerated in this class. I will follow all procedures to handle misconduct as outlined by the University. This means that instances of suspected cheating or plagiarizing will be reported to the University. At the very least, you will receive a zero on the assignment. Please familiarize yourself with the University of Oregon's conduct code, found at <http://conduct.uoregon.edu>. You are responsible for behaving in accordance with this policy and continued enrollment in this class will be considered implicit agreement that you have read and accepted the terms of that policy.

Diversity: It is the policy of the University of Oregon to support and value diversity. To do so requires that we:

- Respect the dignity and essential worth of all individuals.
- Promote a culture of respect throughout the University community.
- Respect the privacy, property, and freedom of others.
- Reject bigotry, discrimination, violence, or intimidation of any kind.
- Practice personal and academic integrity and expect it from others.
- Promote the diversity of opinions, ideas and backgrounds which is the lifeblood of the university.

Prohibited Discrimination and Harassment Reporting

Any student who has experienced sexual assault, relationship violence, sex or gender-based bullying, stalking, and/or sexual harassment may seek resources and help at safe.uoregon.edu. To get help by phone, a student can also call either the UO's 24-hour hotline at 541-346-7244 [SAFE], or the non-confidential Title IX Coordinator at 541-346-8136. From the SAFE website, students may also connect to Callisto, a confidential, third-party reporting site that is not a part of the university.

Students experiencing any other form of prohibited discrimination or harassment can find information at respect.uoregon.edu or aaeo.uoregon.edu or contact the non-confidential AAEO office at 541-346-3123 or the Dean of Students Office at 541-346-3216 for help. As UO policy has different reporting requirements based on the nature of the reported harassment or discrimination, additional information about reporting requirements for discrimination or harassment unrelated to sexual assault, relationship

violence, sex or gender based bullying, stalking, and/or sexual harassment is available at <http://aaeo.uoregon.edu/content/discrimination-harassment>
Specific details about confidentiality of information and reporting obligations of employees can be found at <https://titleix.uoregon.edu>.

The instructor of this class, as a Student Directed Employee, will direct students who disclose sexual harassment or sexual violence to resources that can help and will only report the information shared to the university administration when the student requests that the information be reported (unless someone is in imminent risk of serious harm or a minor). The instructor of this class is required to report all other forms of prohibited discrimination or harassment to the university administration.

Mandatory Reporting of Child Abuse

UO employees, including faculty, staff, and GEs, are mandatory reporters of child abuse. This statement is to advise you that that your disclosure of information about child abuse to a UO employee may trigger the UO employee's duty to report that information to the designated authorities. Please refer to the following links for detailed information about mandatory reporting: <https://hr.uoregon.edu/policies-leaves/general-information/mandatory-reporting-child-abuse-and-neglect/presidents-message>

Collaborative Learning: Discussing homework with other students and your instructors is encouraged, as are homework and study groups for exams. However, an individual homework must be submitted by each student (not photocopied or copy-paste) and all hand calculations must be shown. If there are required substantive conclusions or summaries those must also be written individually. Finally, all quiz homeworks and exams must be completed individually. Copying during the exams is cheating and will at the very least result in a zero on the exam. I encourage you to review the University policy on academic dishonesty; you are responsible for behaving in accordance with this policy and continued enrollment in this class will be considered implicit agreement that you have read and accepted the terms of that policy.

Class Etiquette & Norms:

- Arrive on time and stay for the entire class.
- Treat your fellow students and your instructors with respect.
- Turn the ringer off on your cell phone during class.
- If you attend class, please be attentive (no texting, reading novels, web-surfing, etc).
- Ask questions and speak up during class.
- Stop by and see Jordan and your GTFs during office hours.

Suggestions for Success:

1. Keep up!!
 - Read before class so you are ready to participate and will get the most out of lecture.
 - Complete homework on time. If you fall behind it is harder to focus on the new material.
 - Don't try to cram before exams. You can't learn the required skills overnight.
2. Be active!!
 - Actively participate in your learning.
 - Use the Learning Checks in the textbook to assess your comprehension.
 - Practice the calculations.
 - Work along with the instructors during exercises.
 - Ask questions.
3. Don't give up!!
 - Statistics will be new to most of you and as a new skill it takes time to learn and master.
 - Being able to do statistics is a skill not an innate ability.
 - If you don't get it the first time that doesn't mean you will not be able to do so with practice.
 - If you get stuck try a new tactic.
 - If you are really stuck ask for help (Jordan, GTFs, Stats Tutors, fellow students).

Date	Topic	Readings
10/1	Introduction	Ch. 1-2
10/3		Ch 3 for lab
10/8	Descriptive Statistics	Ch. 4 and 5
10/10	Probability	Ch. 7
10/15	Samples	Ch. 8
10/17	MIDTERM 1	
10/22	Hypothesis Testing	Ch. 9
10/24	One Sample z-test and t-test	Ch. 11 (p. 241-252)
10/29	Independent Samples t-test	Ch. 11 (p. 252-260)
10/31	Related Samples t-test	Ch. 11 (p. 263-280)
11/5	One-way ANOVA	Ch. 13 (p.327-353)
11/7	MIDTERM 2	
11/12	Repeated ANOVA	Ch. 13 (p.353-359)
11/14	Factorial ANOVA	Ch. 14 (p. 371-383)
11/19	Correlation	Ch. 12 (p.281-291)
11/21	Regression	Ch. 12 (p.292-298)
11/26	Chi-Square	Ch. 10
11/28	THANKSGIVING – NO CLASS	
12/3	Which Test and Overview	
12/5	Wrap-up and Review	
Tuesday 12/10	Final Exam at 12:30 PM	